

## REMARKS

The Office Action mailed on October 7, 2004 has rejected all of the claims under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and claim the subject matter which the applicant regards as the invention. Specifically, the Office Action notes that the use of the term ‘perception’ in claim 1 is the basis for the rejection. One dictionary meaning of ‘perception’ suggests it as being the “result of a viewer’s observation,” with perception received by a viewer rather than being a generated quality. The Office Action goes on to note “it is not understood how sensor information generates “perceptions.””

Applicants thank the Examiner for acknowledging patentability of claims 1-30 (but for the alleged lack of clarity discussed above). The Office Action invited amendments or clarifications to overcome the rejection under 35 U.S.C. § 112, second paragraph. In the event of amendments to the claims, the Office Action indicated that claims 2-30 would be allowable if they are rewritten, if necessary, to encompass all of the limitations of the amended base claim.

In response, applicants note first there are multiple synonyms and meanings for the noun “perception,” including many that came into vogue since 1994, the date for the dictionary meaning relied upon by the Office Action. For instance, by 2001, WordNet, readily accessed via the search engine A9.com, identifies five meanings:

- a) the representation of what is perceived; basic component in the formation of a concept;
- b) a way of conceiving something;
- c) the process of perceiving;
- d) knowledge gained by perceiving; and
- e) becoming aware of something via the senses.

As is evident, the meaning of perception is exquisitely dependent on the context. In particular, meanings b) through d) appear to be a better guide to the manner in which the term is used in the present application in view of the non-human or virtual human context.

The summary of the invention introduces the term ‘perception’ in paragraph 9, see the published application. Specifically, it notes a designer “creates a rough outline of perceptions, decisions, and actions” of which the system must be capable in order to exhibit desired features. Thus, the term is clearly used to describe perception not by an individual but by a system. Paragraph 10 of the application then goes on to use “perception features,” which implement the identified perception specifications. As an example of ‘perception

features' the application provides in the context of an auto-pilot the "system must be able to detect an object and how far away it is." Paragraph 9.

The specification clarifies in paragraph 11 that perceptions are generated by a perception feature. Thus, a perception, as used in the application is a particular value or state of a particular perception feature. Each type of perception feature will potentially cause generation of several perceptions. The perception feature of detecting how far away an object is may result in the generation of a perception: such as, 500 meters straight ahead, or a long distance away or very close and the like as may be needed to drive the decision features. Thus, 'perception' corresponds most closely to meaning d) from the meanings a) through e) enumerated by WordNet, i.e., knowledge gained by perceiving. Even more accurately, perception represents specific knowledge or value generated by a perception feature, preferably, after processing of input data. As an example, for a decision requiring action in response to a distant object requires a perception of 'distant' object by a perception feature.

In view of this clarification, based on the filed specification, the rejection of claims 1-30 under 35 U.S.C. § 112, second paragraph has been overcome. Therefore, the application is in order for allowance and favorable reconsideration of the pending claims is respectfully requested.

No fees are estimated to be due for this response other than that required for the enclosed Petition for Extension of Time for three months, which fee is estimated to be \$510.00. Please charge any required fee to Jones Day Deposit Account No. 50-3013.

Respectfully submitted,



Date: April 7, 2005

Rattan Nath

(Reg. No. 43,827)

**JONES DAY**  
222 East 41<sup>st</sup> Street  
New York, NY 10017  
(212) 326-3939

Enclosure